



POSTER PRESENTATION

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Expression of IL-1 family members upon stimulation with IL-17 differs in keratinocytes derived from psoriasis patients and healthy donors

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Background

A number of studies have challenged the T cell centred pathogenetic view of psoriasis by the finding that epithelium-expressed genes are intimately involved in the inflammatory process. IL-17 is an important inflammatory mediator in skin psoriasis.

Objective

IL-17 is known to act on keratinocytes and we were interested in its impact on expression of pro- and anti-inflammatory IL-1 family members.

Methods

We compared human primary keratinocytes derived from psoriasis patients and healthy individuals using qRT-PCR and ELISA.

Results

In the presence of IL-17 psoriasis derived keratinocytes showed a significantly higher induction of the pro-inflammatory members IL-1F6 and IL-1F9 compared with those from healthy individuals but not of anti-inflammatory members IL-1F5, IL-1F7 or IL-1F3. Both basal, as well as IL-17 induced production of IL-1F2/IL-1β and IL-1F1/IL-1α were found to be significantly lower in psoriasis keratinocytes.

Conclusion

As keratinocytes were derived from epidermal stem cells of the hair follicles and obtained from non-lesional sites, differences found are likely to present an intrinsic

feature of psoriasis epithelium. Our data suggest that the significance of IL-1 members as therapeutic targets in psoriasis conditions merits further and thorough investigation.

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